#### January 22, 2003

RE: *PRODUCT SPECIALTIES 043-15615-00039* 

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

## **Notice of Decision: Approval - Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, within (18) eighteen days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

## Indiana Department of Environmental Management



We make Indiana a cleaner, healthier place to live.

Governor

Lori F. Kaplan Commissioner

6015

100 North Senate AvenueP. O. Box 6015Indianapolis, Indiana 46206-

(317) 232-8603 (800) 451-6027 www.state.in.us/idem

# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL OFFICE OF AIR QUALITY

## Product Specialties, Inc. 2073 McDonald Avenue New Albany, Indiana 47150

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F043-15615-00039				
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:January 22, 2003 Expiration Date:January 22, 2008			

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#### SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a plastic film manufacturing plant.

Authorized individual: Vice President

Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150 Mailing Address: 2073 McDonald Avenue, New Albany, Indiana 47150

General Source Phone: (812) 945-0920

SIC Code: 3081 Source Location Status: Floyd

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD Rules:

Minor Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) PVC resin powder storage silo, identified as EU-01, with a maximum storage capacity of 78.8 tons, using a baghouse for particulate matter control, and exhausting to stack vent V1;
- (b) One (1) calcium carbonate (CaCO<sub>3</sub>) storage silo, identified as EU-02, with a maximum storage capacity of 61 tons, using a baghouse for particulate matter control, and exhausting to stack vent V2;
- (c) Two (2) plastic film mixing lines, identified as EU-05 and EU-10, with a maximum capacity of 1588 pounds per hour, using baghouses for particulate matter control, exhausting to stack vent V3;
- (d) Two (2) extrusion units, identified as EU-06 and EU-07, each having a limited throughput of 1020 pounds per hour, exhausting to stacks S4 and S5;
- (e) One (1) rotogravure press, identified as EU-09, with a maximum coverage of 15 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S7;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as EU-11, with a maximum coverage of 14.4 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S10;
- (g) One (1) rotogravure press with four (4) color printing heads, identified as EU-13, with a maximum coverage of 14.4 pounds of ink per million square inches (lb/million in²) of sheet vinyl, exhausting to stack S14;

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- (h) One (1) printing press, identified as wash coater #2, with a maximum line speed of 150 feet per minute (ft/min) and a coating width of 57 inches, exhausting to stack WC2;
- (i) Three (3) laminators, identified as EU-08, EU-12, and EU-14, each having a limited production rate of 4,670,000 yds laminated film/year, exhausting to stacks S6, S8, and S15.

#### Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)] A.3

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- Natural gas fired combustion sources with the heat input equal to or less than ten (10) (a) million Btu per hour:
  - (1) One (1) natural gas-fired boiler rated at 2.7 MMBTU per hour;
  - (2)One (1) natural gas-fired boiler rated at 2.0 MMBtu/hr,
  - (3)Two (2) natural gas-fired indirect heaters rated at 0.75 MMBtu/hr each,
  - (4) Two (2) natural gas fired dryers rated at 304,000 BTU/hr each,
  - (5) One (1) natural gas fired space heater rated at 580,000 BTU/hr; and
  - One (1) natural gas fired indirect heater for EU-13 rated at 2.0 MMBtu/hr. (6)
- (b) One (1) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
- (c) VOC/HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (d) Equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- Closed loop heating and cooling systems; (e)
- (f) Natural draft cooling towers not regulated under a NESHAP;
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
- (h) Paved and unpaved roads and parking lots with public access;
- (i) Blow down for sight glass, boiler, compressors, pumps, and cooling towers.
- (j) Emission units whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(d)(1):
  - (1) Three (3) granulators that chop waste film and recirculate to the mixing line; and
  - (2)One (1) plastisol mixing line.
- FESOP Applicability [326 IAC 2-8-2] A.4

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This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

#### A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

#### SECTION B GENERAL CONDITIONS

#### B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

#### B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

#### B.3 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

#### B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

#### B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

#### B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

## B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized"

- individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.
- (c) For information furnished by the Permittee to IDEM, OAQ, the Permitte may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

#### B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

#### B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

#### B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

#### B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

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- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall-maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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#### B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis. Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

#### B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

## B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

#### B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

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- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

  If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

#### B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.19 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

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> Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

> > and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]
  The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

#### B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

#### B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

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- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4320 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

#### Entire Source

#### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P] [326 IAC 6-3-2]
  - (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
  - (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

#### C.2 Overall Source Limit [326 IAC 2-8] [326 IAC 2-2]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable;
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

#### C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

#### C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

#### C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vent to the control equipment are in operation.

#### C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

> Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
  - The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
  prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
  thoroughly inspect the affected portion of the facility for the presence of asbestos. The
  requirement that the inspector be accredited is federally enforceable.

#### Testing Requirements [326 IAC 2-8-4(3)]

#### C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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#### C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

#### C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no often less than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

#### C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.
- (c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.

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#### ERIC needs to check section C.14against new FESOP model

#### Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the

applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

## C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

(a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

#### C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

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- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

#### **Stratospheric Ozone Protection**

#### C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]: Plastic Film Manufacturing Operation

- (a) One (1) PVC resin powder storage silo, identified as EU-01, with a maximum storage capacity of 78.8 tons, using a baghouse for particulate matter control, and exhausting to stack vent V1;
- (b) One (1) calcium carbonate (CaCO<sub>3</sub>) storage silo, identified as EU-02, with a maximum storage capacity of 61 tons, using a baghouse for particulate matter control, and exhausting to stack vent V2;
- (c) Two (2) plastic film mixing lines, identified as EU-05 and EU-10, with a maximum capacity of 1588 pounds per hour, using baghouses for particulate matter control, exhausting to stack vent V3;
- (d) Two (2) extrusion units, identified as EU-06 and EU-07, each having a limited throughput of 1020 pounds per hour, exhausting to stacks S4 and S5;
- (e) One (1) rotogravure press, identified as EU-09, with a maximum coverage of 15 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S7;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as EU-11, with a maximum coverage of 14.4 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S10;
- (g) One (1) rotogravure press with four (4) color printing heads, identified as EU-13, with a maximum coverage of 14.4 pounds of ink per million square inches (lb/million in²) of sheet vinyl, exhausting to stack S14;
- (h) One (1) printing press, identified as wash coater #2, with a maximum line speed of 150 feet per minute (ft/min) and a coating width of 57 inches, exhausting to stack WC2;
- (i) Three (3) laminators, identified as EU-08, EU-12, and EU-14, each having a limited production rate of 4,670,000 yds laminated film/year, exhausting to stacks S6, S8, and S15.

The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

#### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 Particulate Matter (PM) [40 CFR 52 Subpart P]

Pursuant to 40 CFR 52 Subpart P (Particulate Emission Limitations for Manufacturing Processes) the allowable particulate emission rate from the storage silos (EU-1 & EU-2), the mixing operations (EU-5 & EU-10), the extrusion units (EU-6 & EU-07), and the laminating lines (EU-8, EU-12, and EU-14) shall not exceed the following allowable PM emissions when operating at a process weight rate as shown in the table below:

Process Facility	Stack ID	Process Throughput (tons/hr)	Allowable PM Emissions (lbs/hr)
Resin Powder Storage Silo (EU-1)	V1	0.44	2.37
CaCO <sub>3</sub> Storage Silo (EU-2)	V2	0.29	1.79
Plastic Film Mixing Line, EU-05	V3	0.794	3.52
Plastic Film Mixing Line, EU-10	V6	0.794	3.52
Extrusion Unit, EU-06	S4	0.51	1.66
Extrusion Unit, EU-07	S5	0.51	1.66
Laminator, EU-08	S6	0.675	3.15
Laminator, EU-12	S8	0.844	3.66
Laminator, EU-14	S15	0.563	2.79

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

#### D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-11]

Pursuant to 326 IAC 8-2-11 (Fabric and Vinyl Coating VOC Limitations), the VOC content of the coatings used from the rotogravure presses EU-09, EU-11, EU-13, and wash coater #2 to completely saturate the substrate shall be limited to 4.8 pounds of VOC per gallon of coating less water delivered to the applicator.

# D.1.3 Volatile Organic Compounds [326 IAC 2-8] [326 IAC 8-1-6] [326 IAC 20][40 CFR 63, Subpart KK] Pursuant to 326 IAC 2-8, the following facilities shall be limited as follows:

- (a) The total material compounded from extruders EU-06 and EU-07 shall not exceed 9,127,920 pounds per twelve (12) consecutive month period with compliance determined at the end of each month. The emission rate shall not exceed 0.0043 lb VOC/lb compounded. These limits are equivalent to a total VOC emissions of 19.6 tons.
- (b) The VOC input for the rotogravure press EU-11 shall not exceed 6.2 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is equivalent to VOC emissions of less than 6.2 tons per year.
- (c) The VOC input from the wash coater #2 shall not exceed 3.11 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is equivalent to VOC emissions of less than 3.11 tons per year.
- (d) The VOC input for the rotogravure press EU-09 shall not exceed 1.55 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is equivalent to VOC emissions of less than 1.55 tons per year.

- (e) The VOC input for the rotogravure press EU-13 shall not exceed 4.66 tons per twelve (12) month period with compliance determined at the end of each month. This limit is equivalent to VOC emissions of less than 4.66 tons per year.
- (f) The production rate of laminators EU-08, EU-12, and EU-14 shall each not exceed 4,670,000 yards of film per twelve (12) consecutive month period with compliance determined at the end of each month. The emission rate shall not exceed 0.0065 pounds of VOC per yard of film. These limits are equivalent to VOC emissions of 15.17 tons per year of VOC total for each of the three laminators for a total of 45.51.
- (g) The input of a single HAP to the printers (EU-09, EU-11, and EU-13) and the Wash Coater #2 shall not exceed 9 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The input of a combination of HAPs to the printers (EU-09, EU-11, and EU-13) and the Wash Coater #2 shall not exceed 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

The limits in conditions D.1.4 (a) through (f) are equivalent to less than 80.8 tons per year of VOC. These limits ensure that the VOC emissions for the entire source are less than one hundred (100) tons per year. The HAP input limits are equivalent to emissions of single HAPs of less than 10 tons per year and 25 tons per year of a combination of HAPS from the entire source. Therefore, the requirements of 326 IAC 2-7 are not applicable. The limit in D.1.3 (f) ensures that 326 IAC 8-1-6 does not apply to the laminators. The limit in D.1.3 (g) also ensures that 326 IAC 20 and 40 CFR Subpart KK do not apply.

#### D.1.4 General Provisions Relating to NSPS [326 IAC 12-1] [40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to printing operations EU-09, EU-11, and EU-13 except when otherwise specified in 40 CFR Part 60, Subpart FFF.

#### D.1.5 Volatile Organic Compounds (VOC) [326 IAC 12] [40 CFR 60, Subpart FFF]

Pursuant to 40 CFR 60.582(a)(1), the permittee shall use inks with a weighted average VOC content less than 1.0 kilogram VOC per kilogram ink solids in the printing operations EU-09, EU-11, and EU-13.

#### D.1.6 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

#### **Compliance Determination Requirements**

#### D.1.7 Volatile Organic Compounds (VOC) [326 IAC 12] [40 CFR 60, Subpart FFF]

Compliance with the VOC content contained in Condition D.1.5 shall be determined pursuant to 40 CFR 60.583(c) using plant blending and inventory records for each affected facility in conjunction with ink manufacturers' formulation data.

#### D.1.8 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP)

Compliance with the VOC and HAP content and usage limitations contained in Conditions D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

#### D.1.9 Particulate Matter (PM)

In order to comply with D.1.1, the baghouses for PM control shall be in operation and control emissions from the silos (EU-1, and EU-2) and the plastic film mixing lines (EU-5 and EU-10) at all times that the plastic film manufacturing is in operation.

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#### Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

#### D.1.10 Visible Emissions Notations

- (a) Visible emission notations of each plastic film mixing line (EU-5 and EU-10) baghouse stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations from each storage silo baghouse stack exhaust (EU-1 and EU-2) shall be performed during loading operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (c) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (d) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (e) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (f) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

#### D.1.11 Baghouse Inspections

An inspection shall be performed within the last month of each calendar quarter of all bags controlling the plastic film lines (EU-5 and EU-10) when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

#### D.1.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse associated with the plastic film mixing lines (EU-5 and EU-10), at least once per working shift when each plastic film line is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan-Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

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#### D.1.13 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C Compliance Response Plan Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### D.1.14 Record Keeping Requirements

- (a) To document compliance with Condition D.1.10, the Permittee shall maintain records of the visible emission notations of each plastic film lines (EU-5 and EU-10) stack exhaust once per shift and the visible emission notations performed during loading operations of the silos (EU-1 and EU-2).
- (b) To document compliance with Condition D.1.12, the Permittee shall maintain per shift records of the total static pressure drop during normal operation for the plastic film mixing lines (EU-5 and EU-10).
- (c) To document compliance with VOC and HAPs content and usage limits in Conditions D.1.2, D.1.3, and D.1.5 the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage limits and/or the VOC and HAPs emission limits established in Conditions D.1.2, D.1.3, and D.1.5.
  - (1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The weighted average VOC content of the coatings used for each month;
  - (4) The cleanup solvent usage for each month;
  - (5) The total VOC and HAP usage for each month; and

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- (6) The weight of VOCs and HAPs emitted for each compliance period.
- (d) To document compliance with Condition D.1.11, the Permittee shall maintain records of the results of the inspections required under Condition D.1.11.
- (e) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.15 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

#### D.1.16 Reporting Requirements [40 CFR 60.580, Subpart FFF]

- (a) The Permittee shall submit semi-annual reports to the Commissioner of exceedances of the weighted average Volatile Organic Compound (VOC) content, specified in §60.582(a)(1). These reports shall be postmarked within 30 days following the end of the second and fourth calendar quarters
- (c) The requirements of 40 CFR 60.585 remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternate means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this subsection, provided that they comply with the requirements established by the State.

#### **SECTION D.2**

#### **FACILITY OPERATION CONDITIONS**

#### **Facility Description: Insignificant Activities**

- (a) Natural gas fired combustion sources with the heat input equal to or less than ten (10) million Btu per hour:
  - (1) One (1) natural gas-fired boiler rated at 2.7 MMBTU per hour;
  - (2) One (1) natural gas-fired boiler rated at 2.0 MMBtu/hr,
  - (3) Two (2) natural gas-fired indirect heaters rated at 0.75 MMBtu/hr each,
  - (4) Two (2) natural gas fired dryers rated at 304,000 BTU/hr each,
  - (5) One (1) natural gas fired space heater rated at 580,000 BTU/hr; and
  - (6) One (1) natural gas fired indirect heater for EU-13 rated at 2.0 MMBtu/hr.
- (b) One (1) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
- (c) VOC/HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (d) Equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- (e) Closed loop heating and cooling systems;
- (f) Natural draft cooling towers not regulated under a NESHAP;
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
- (h) Paved and unpaved roads and parking lots with public access;
- (i) Blow down for sight glass, boiler, compressors, pumps, and cooling towers.
- (j) Emission units whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(d)(1):
  - (1) Three (3) granulators that chop waste film and recirculate to the mixing line; and
  - (2) One (1) plastisol mixing line with emissions exhausting to the interior of the plant.

The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

#### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### D.2.1 Particulate [326 IAC 6-2-4]

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constructed after September 21, 1983, shall each be limited to 0.60 pound per million BTU heat input.

#### D.2.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the brazing, soldering, welding, and cutting torch equipment or the three (3) granulators that chop waste film shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### D.2.3 Volatile Organic Compounds [326 IAC 8-3-2] [326 IAC 8-3-5]

That pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) and 326 IAC 8-3-5 (Cold Degreaser Operation and Control), the degreasing operation shall comply with the requirements of this rule.

- (a) According to 326 IAC 8-3-2, the owner or operator shall:
  - (1) Equip the cleaner with a cover;
  - (2) Equip the cleaner with a facility for draining cleaned parts;
  - (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
  - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
  - (5) Provide a permanent, conspicuous label summarizing the operation requirements; and
  - (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.
- (b) According to 326 IAC 8-3-5(a), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
  - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one hand if:
    - A) The solvent volatility is greater than three-tenths (0.3) pounds per square inch (15 millimeters of mercury) measured at 38 degrees Celsius (100 degrees Fahrenheit);
    - B) The solvent is agitated; or
    - C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than six-tenths (0.6) pounds per square inch (thirty-two (32) millimeters of mercury) measured at thirty-eight degrees Celsius (38°C) (one

hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in 326 IAC 8-3-5(b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than six-tenths (0.6) pounds per square inch (thirty-two (32) millimeters of mercury) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
  - A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
  - B) A water cover when solvent is used is insoluble in, and heavier than,
  - C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (c) That pursuant to 326 IAC 8-3-5(b), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
  - (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Product Specialties, Inc.

Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150 Mailing Address: 2073 McDonald Avenue, New Albany, Indiana 47150

FESOP No.: 043-15615-00039

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.					
Please check what document is being certified:					
9 Annual Compliance Certification Letter					
9 Test Result (specify)					
9 Report (specify)					
9 Notification (specify)					
9 Affidavit (specify)					
9 Other (specify)					
	_				
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.					
Signature:					
Printed Name:					
Title/Position:					
Date:					

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Product Specialties, Inc. New Albany, Indiana Permit Reviewer: ERG/EH

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

**COMPLIANCE BRANCH** P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) **EMERGENCY OCCURRENCE REPORT**

Source Name: Product Specialties, Inc.

Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150 Mailing Address: 2073 McDonald Avenue, New Albany, Indiana 47150

043-15615-00039 FESOP No.:

	This	form	consists	of 2	pages
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 ${f 9}$  This is an emergency as defined in 326 IAC 2-7-1(12)

CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile

Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

# If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:				
Control Equipment:				
Permit Condition or Operation Limitation in Permit:				
Description of the Emergency:				
Describe the cause of the Emergency:				

f any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency? Y N Describe:	
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>X</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necesimminent injury to persons, severe damage to equipment, substantial loss of capital of product or raw materials of substantial economic value:	
Form Completed by: Title / Position: Date: Phone:	

A certification is not required for this report.

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Phone:

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

# **FESOP Quarterly Report**

Source Name: Source Address: Mailing Address: FESOP No.: Facility: Parameter: Limit:	2073 M 2073 M 043-156 Lamina Product 4,630,0	Product Specialties, Inc.  2073 McDonald Avenue, New Albany, Indiana 47150  2073 McDonald Avenue, New Albany, Indiana 47150  043-15615-00039  Laminators EU-8, EU-12, and EU-14  Production Limits  4,630,000 yards of film/per twelve consecutive month period with compliance determined at the end of each month for each laminator (EU-8, EU-12, and EU-14)  YEAR:					14)		
Month		Column 1			Column 2		Colu	Column 1 + Column 2	
Month		This Month		Pre	vious 11 M	lonths	1	12 Month Total	
	EU-8	EU-12	EU-14	EU-8	EU-12	EU-14	EU-8	EU-12	EU-14
Month 1									
Month 2									
Month 3									
	<ul><li>9 Deviation</li><li>Deviation</li><li>Submitted be</li></ul>	tle / Position:gnature:							

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Product Specialties, Inc. New Albany, Indiana Permit Reviewer: ERG/EH

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report  Source Name: Product Specialties, Inc. 2073 McDonald Avenue, New Albany, Indiana 47150 Mailing Address: 2073 McDonald Avenue, New Albany, Indiana 47150 FESOP No.: 043-15615-00039 Facility: Extruders EU-6 and EU-7 Parameter: Production Limits Limit: Total of 9,127,920 pounds of material compounded per twelve consecutive month period with compliance determined at the end of each month for EU-6 and EU-7						
	YEAR	:				
NA - 11	Column 1	Column 2	Column 1 + Column 2			
Month	This Month	Previous 11 Months	12 Month Total			
Month 1						
Month 2						
Month 3						
9 Subr Title	· · · · · · · · · · · · · · · · · · ·	nis quarter.				

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Source Address: Mailing Address: FESOP No.: Facility: Parameter: Limit:	Product Specialties, Inc. 2073 McDonald Avenue, 2073 McDonald Avenue, 043-15615-00039 Printing Press EU-9 VOC Input	New Albany, Indiana 47150 New Albany, Indiana 47150 twelve consecutive month period	od with compliance determined
	YEAR	:	
Manuth	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
9 Subr Title	/ Position: ature: :	his quarter.	

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Source Address: Mailing Address: FESOP No.: Facility: Parameter: Limit:	Product Specialties, Inc. 2073 McDonald Avenue, 2073 McDonald Avenue, 043-15615-00039 Printing Press EU-11 VOC Input	Quarterly Report  New Albany, Indiana 47150 New Albany, Indiana 47150 ecutive month period with comp	bliance determined at the end
	YEAR	:	
	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
9 Subr Title	mitted by: / Position: ature:		

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report  Source Name: Product Specialties, Inc. 2073 McDonald Avenue, New Albany, Indiana 47150 2073 McDonald Avenue, New Albany, Indiana 47150 2073 McDonald Avenue, New Albany, Indiana 47150 FESOP No.: 043-15615-00039 Facility: Printing Press EU-13 Parameter: VOC Input Limit: 4.66 tons VOC per twelve consecutive month period with compliance determined at the end of each month						
	YEAR	:				
	Column 1	Column 2	Column 1 + Column 2			
Month	This Month	Previous 11 Months	12 Month Total			
Month 1						
Month 2						
Month 3						
9 Subr Title	nitted by: / Position: ature:					

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Source Address: Mailing Address: FESOP No.: Facility: Parameter: Limit:	Product Specialties, Inc. 2073 McDonald Avenue, 2073 McDonald Avenue, 043-15615-00039 Washcoater #2 VOC Input	New Albany, Indiana 47150 New Albany, Indiana 47150 New Albany, Indiana 47150 e consecutive month period with	h compliance determined at
	YEAR	:	
M d	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
9 Subr Title	·	his quarter.	

Product Specialties, Inc.

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New Albany, Indiana

OP No. F043-15615-00039

Permit Reviewer: ERG/EH

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

	FESOP	Quarterly Report				
Source Name: Source Address: Mailing Address: FESOP No.: Facility: Parameter: Limit:	Product Specialties, Inc. 2073 McDonald Avenue, New Albany, Indiana 47150					
	YEAR	:				
	Column 1	Column 2	Column 1 + Column 2			
Month	This Month	Previous 11 Months	12 Month Total			
Month 1						
Month 2						
Month 3						
9	No deviation occurred in	this quarter.				
9	Deviation/s occurred in the Deviation has been report	•				
Tit Siç	Ibmitted by: le / Position: gnature: tte:					

Attach a signed certification to complete this report.

Phone:

Phone:

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

	FESOP	Quarterly Report				
Source Name: Source Address: Mailing Address: FESOP No.: Facility: Parameter: Limit:	Product Specialties, Inc. 2073 McDonald Avenue, New Albany, Indiana 47150 2073 McDonald Avenue, New Albany, Indiana 47150 043-15615-00039 Printing Presses: EU-9, EU-11, EU-13, and Washcoater #2 Combination of HAPs 24 tons of input of a combination of HAPs per twelve consecutive month period with compliance determined at the end of each month.					
	YEAR	:				
	Column 1	Column 2	Column 1 + Column 2			
Month	This Month	Previous 11 Months	12 Month Total			
Month 1						
Month 2						
Month 3						
9	No deviation occurred in	this quarter.				
9	Deviation/s occurred in the Deviation has been report					
Title	e / Position: nature:					

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Product Specialties, Inc. New Albany, Indiana Permit Reviewer: ERG/EH

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Product Specialties, Inc. Source Address: 2073 McDonald Avenue, New Albany, Indiana 47150 2073 McDonald Avenue, New Albany, Indiana 47150 Mailing Address: FESOP No.: 043-15615-00039 Months: to Year: Page 1 of 2 This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". 9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. 9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD Permit Requirement (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations:** Probable Cause of Deviation: Response Steps Taken: **Permit Requirement** (specify permit condition #) Date of Deviation: **Duration of Deviation: Number of Deviations: Probable Cause of Deviation:** Response Steps Taken:

Page 2 of 2

	1 1.90 - 11
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Form Completed By:	
Title/Position:	
Date:	
Phone:	

# **January 22, 2003**

# Indiana Department of Environmental Management Office of Air Quality

# Addendum to the Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Renewal

# **Source Background and Description**

Source Name: Product Specialties, Inc.

Source Location: 2073 McDonald Avenue, New Albany, Indiana 47150

County: Floyd SIC Code: 3081

Operation Permit No.: F043-15615-00039

Permit Reviewer: ERG/KC

On November 15, 2002, the Office of Air Quality (OAQ) had a notice published in the New Albany Tribune, New Albany, Indiana, stating that Product Specialties, Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal to operate a plastic film manufacturing plant with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On December 13, 2002, Product Specialties, Inc. submitted comments on the proposed FESOP Renewal. A summary of the comments follows. Bold text has been added to the permit and text with a line through it has been deleted as a result of the comments. The Table of Contents was updated as needed.

### Comment 1:

The source noted that the facility description in A.2(f) describes EU-11 as having a maximum coverage of 14.4 lb/million in² and the facility description in A.2(g) describes EU-13 as having a maximum coverage of 1.622 gal/million in². They stated that in this case, 14.4 pounds is equivalent to 1.622 gallons. For consistency, they requested that EU-11 and EU-13 both be described as having a maximum coverage of 14.4 lb/million in².

### **Response to Comment 1:**

The following changes were made as a result of this comment:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(g) One (1) rotogravure press with four (4) color printing heads, identified as EU-13, with a maximum coverage of <del>1.622 gallons per million in<sup>2</sup> 14.4 pounds of ink per million square inches (lb/million in<sup>2</sup>) of sheet vinyl, exhausting to stack S14;</del>

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Product Specialties, Inc. New Albany, Indiana Permit Reviewer: ERG/KC

### **SECTION D.1**

### **FACILITY OPERATION CONDITIONS**

# Facility Description [326 IAC 2-8-4(10)]: Plastic Film Manufacturing Operation

(g) One (1) rotogravure press with four (4) color printing heads, identified as EU-13, with a maximum coverage of <del>1.622 gallons per million in<sup>2</sup> 14.4 pounds of ink per million square inches</del> (lb/million in<sup>2</sup>) of sheet vinyl, exhausting to stack S14;

The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

#### Comment 2:

The source noted that Condition B.14(b)(4) states "thin four" when it should say "within four." The source requested that this typo be corrected.

# **Response to Comment 2:**

The typo was corrected as follows:

#### B.14 Emergency Provisions [326 IAC 2-8-12]

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)

or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

# Comment 3:

The source noted that Condition D.1.11(f) refers to a Compliance Response Plat when it should refer to a Compliance Response Plan. The source requested that this typo be corrected.

# **Response to Comment 3:**

The typo was corrected as follows. Corrections made in response to other comments are included below.

#### D.1.<del>11</del>10 Visible Emissions Notations

(f) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plat Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

#### Comment 4:

The source noted that Condition D.1.15(b) states "records of the inlet and outlet differential static pressure" when it should state "records of the differential static pressure." The source requested that this be corrected.

### **Response to Comment 4:**

The following changes were made as a result of this comment. Corrections made in response to other comments are included below.

# D.1.<del>15</del>**14** Record Keeping Requirements

(b) To document compliance with Condition D.1.1213, the Permittee shall maintain per shift records of the **total** inlet and outlet differential static pressure **drop** during normal operation for the plastic film mixing lines (EU-5 and EU-10).

#### Comment 5:

The source requested that Condition D.1.7 requiring performance testing every five (5) years be removed from the permit. The source provided the following reasons for the removal:

- (a) The source feels that the emission factors described have already been approved by IDEM in the original FESOP and the laminator emission factor was again approved by IDEM in a 2001 permit approval for EU-14. These emission factors were derived from some stack testing done at GenCorp for a very similar source. The source is unaware of any known emission factors published for vinyl extrusion and laminating so these emission factors from a similar source were presented to IDEM in 1996 with the original FESOP application. The source believes they were accepted at that time by IDEM rather than requiring emission testing for derivation of emission factors.
- (b) The source feels that the emission testing required by the draft FESOP is economically infeasible for this plant. They estimated that testing to be approximately \$10,000 per emission unit. They feel that a \$50,000 stack test every five (5) years cannot be justified on emission units that do not have compliance issues.
- (c) The source stated that the emissions from these operations are not easily captured for testing. There are some canopy hoods that vent heat and some emissions above the laminating operations and there is very minimal ventilation on the extrusion operations. The source stated that these areas are not easily enclosable for the purpose of testing.
- (d) The source believes that there are no state or federal applicable requirements for these emission units that require testing. They also stated that they are unaware of any other vinyl manufacturers in Indiana that have been required to perform compliance tests on their extrusion and laminating operations.

# **Response to Comment 5:**

The testing requirements were removed from the permit because these facilities do not have the potential to emit greater than forty percent (40%) of the source's total potential to emit VOC, prior to control. Additionally, these units are not subject to a NSPS or NESHAP, do not have control devices, and do not have actual emissions of twenty-five (25) tons per year. Therefore the following changes were made as a result of this comment:

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Product Specialties, Inc. New Albany, Indiana Permit Reviewer: ERG/KC

### D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

Within 180 days after issuance of this permit, in order to demonstrate compliance with Condition D.1.3(a) and (f) the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least one every five (5) years form the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

# D.1.87 Volatile Organic Compounds (VOC) [326 IAC 12] [40 CFR 60, Subpart FFF]

# D.1.98 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP)

# D.1.<del>109</del> Particulate Matter (PM)

# Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1. <del>11</del> 10	Visible	Emissions	Notations

## D.1.<del>12</del>11 Baghouse Inspections

#### D.1.<del>13</del>12 Parametric Monitoring

# D.1.<del>14</del>13 Broken or Failed Bag Detection

# Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

## D.1.<del>15</del>14 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4+10, the Permittee shall maintain records of the visible emission notations of each plastic film lines (EU-5 and EU-10) stack exhaust once per shift and the visible emission notations performed during loading operations of the silos (EU-1 and EU-2).
- (b) To document compliance with Condition D.1.4312, the Permittee shall maintain per shift records of the **total** inlet and outlet differential static pressure **drop** during normal operation for the plastic film mixing lines (EU-5 and EU-10).
- (c) To document compliance with VOC and HAPs content and usage limits in Conditions D.1.2, D.1.3 (b), (c), (d), (e) and (g), and D.1.5 the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage limits and/or the VOC and HAPs emission limits established in Conditions D.1.42, D.1.3, and D.1.5.
  - (1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The weighted average VOC content of the coatings used for each month;
  - (4) The cleanup solvent usage for each month;

Product Specialties, Inc.

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New Albany, Indiana

Permit Reviewer: ERG/KC

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(5) The total VOC and HAP usage for each month; and

- (6) The weight of VOCs and HAPs emitted for each compliance period.
- (d) To document compliance with Condition D.1.<del>12</del>11, the Permittee shall maintain records of the results of the inspections required under Condition D.1.<del>12</del>11.
- (e) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

# D.1.<del>16</del>**15** Reporting Requirements

D.1.4716 Reporting Requirements [40 CFR 60.580, Subpart FFF]

# **January 22, 2003**

# Indiana Department of Environmental Management Office of Air Quality

# Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Renewal

# **Source Background and Description**

Source Name: Product Specialties, Inc.

Source Location: 2073 McDonald Avenue, New Albany, Indiana 47150

County: Floyd SIC Code: 3081

Operation Permit No.: F043-15615-00039

Permit Reviewer: ERG/EH

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Product Specialties relating to the operation of a plastic film manufacturing plant. Product Specialties was issued FESOP (043-6294-00039) on August 12, 1997.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) PVC resin powder storage silo, identified as EU-01, with a maximum storage capacity of 78.8 tons, using a baghouse for particulate matter control, and exhausting to stack vent V1;
- (b) One (1) calcium carbonate (CaCO<sub>3</sub>) storage silo, identified as EU-02, with a maximum storage capacity of 61 tons, using a baghouse for particulate matter control, and exhausting to stack vent V2;
- (c) Two (2) plastic film mixing lines, identified as EU-05 and EU-10, with a maximum capacity of 1588 pounds per hour, using baghouses for particulate matter control, exhausting to stack vent V3;
- (d) Two (2) extrusion units, identified as EU-06 and EU-07, each having a limited throughput of 1020 pounds per hour, exhausting to stacks S4 and S5;
- (e) One (1) rotogravure press, identified as EU-09, with a maximum coverage of 15 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S7;
- (f) One (1) rotogravure press with four (4) color printing heads, identified as EU-11, with a maximum coverage of 14.4 pounds of ink per million square inches (lb/million in²) of PVC sheet, exhausting to stack S11;
- (g) One (1) rotogravure press with four (4) color printing heads, identified as EU-13, with a maximum coverage of 1.622 gallons per million in<sup>2</sup> of sheet vinyl, exhausting to stack S14;

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- (h) One (1) printing press, identified as wash coater #2, with a maximum line speed of 150 feet per minute (ft/min) and a coating width of 57 inches, exhausting to stack WC2;
- (i) Three (3) laminators, identified as EU-08, EU-12, and EU-14, each having a limited production rate of 4,670,000 yds laminated film/year, exhausting to stacks S6, S8, and S15.

# **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

# New Emission Units and Pollution Control Equipment Receiving New Source Review Approval

There are no new emission units operating at this source.

# **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas fired combustion sources with the heat input equal to or less than ten (10) million Btu per hour:
  - (1) One (1) natural gas-fired boiler rated at 2.7 MMBTU per hour;
  - (2) One (1) natural gas-fired boiler rated at 2.0 MMBtu/hr.;
  - (3) Two (2) natural gas-fired indirect heaters rated at 0.75 MMBtu/hr each;
  - (4) Two (2) natural gas fired dryers rated at 304,000 BTU/hr each;
  - (5) One (1) natural gas fired space heater rated at 580,000 BTU/hr; and
  - (6) One (1) natural gas fired indirect heater for EU-13 rated at 2.0 MMBtu/hr.
- (b) One (1) cold cleaner degreasing operation with a capacity of 20 gallons to clean small parts;
- (c) VOC/HAP storage containers for lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (d) Equipment relating to manufacturing activities that does not result in HAP emissions including brazing equipment, cutting torches, soldering equipment, and welding equipment;
- (e) Closed loop heating and cooling systems;
- (f) Natural draft cooling towers not regulated under a NESHAP;
- (g) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment;
- (h) Paved and unpaved roads and parking lots with public access;
- (i) Blow down for sight glass, boiler, compressors, pumps, and cooling towers.

- (j) Emission units whose potential uncontrolled emissions meet the exemption levels specified in 326 IAC 2-1.1-3(d)(1):
  - (1) Three (3) granulators that chop waste film and recirculate to the mixing line; and
  - (2) One (1) plastisol mixing line.

# **Existing Approvals**

The source had been operating under previous approvals including, but not limited to the following:

- (a) FESOP 043-6294-00039, issued on August 18, 1997;
- (b) FESOP Significant Modification, issued on November 16, 1998;
- (c) FESOP Significant Permit Revision, issued on May 30, 2000; and
- (d) FESOP Significant Permit Revision, issued on May 22, 2001.

All conditions from previous approvals were incorporated into this FESOP, except the following:

- (a) F043-6294-00035 issued on August 13, 1997
- (b) F043-10076-00039 issued on November 16, 1998

Condition D.1.2: Particulate Matter <10 microns (PM-10); both (1) and (2)

Reason not incorporated: The original potential to emit calculations for the FESOP included an emission transfer point calculation for the resin powder and calcium carbonate storage silos. This was unnecessary since the transfer of material to each silo was through an enclosed chute with no emissions. D.1.2 established maximum PM-10 emission factors and emission limits to prevent the source from requiring a Title V permit. When the PM-10 potential to emit is calculated without the two transfer points the emissions are below 100 tpy (see calculations). Therefore, this condition is unnecessary, and it was removed from this FESOP renewal.

(c) F043-6294-00039

Condition D.1.13: Particulate Matter

Reason not incorporated: The original FESOP permit had compliance monitoring language that is no longer used in the standard FESOP language. Therefore, this condition was removed. The current language regarding 326 IAC 6-3-2 requirements was used instead.

# **Enforcement Issue**

There are no enforcement actions pending.

# Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on February 19, 2002.

There was no notice of completeness letter mailed to the source.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (pages 1 through 8).

#### **Unrestricted Potential Emissions**

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	97.2
PM-10	97.2
SO <sub>2</sub>	
VOC	248.6
CO	0.5
NO <sub>x</sub>	2.3

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Unrestricted Potential Emissions (tons/yr)
Methanol	2.5
Glycol Ether	10.1
Mineral Spirits	0.1
TOTAL	12.7

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a single HAP is equal to as greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Pursuant to 326 IAC 2-8, this source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict PTE to below Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP).
- (d) Fugitive Emissions Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

## Potential to Emit After Issuance

The source, issued a FESOP on August 12, 1997, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit,

reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. The source's potential to emit is based on the emission units included in the original FESOP (F043-6294-00039; issued on August 12, 1997), the first significant FESOP modification (F043-100070-00039), the first significant FESOP permit revision (F043-10564-00039), and the second significant FESOP permit revision (F043-1367-00039).

	Potential to Emit after Issuance (tons/year)								
Process/facility	PM	PM-10	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC	HAPS		
Storage Silo of Resin (EU-01)	25.1	25.1	-	-	-	-	-		
Storage Silo of CaCO <sub>3</sub> (EU-02)	16.5	16.5	-	-	-	-	-		
Plastic Film Line (EU-05)	12.4	12.4	-	-	-	-	-		
Plastic Film Line (EU-10)	12.4	12.4	-	-	-	-	-		
Extruder (EU-06)	5.3	5.3	-	-	-	Less than 9.8	-		
Extruder (EU-07)	5.3	5.3	-	-	-	Less than 9.8	-		
Laminator (EU-08)	1.2	1.2	-	-	-	Less than 15.2	-		
Laminator (EU-12)	1.2	1.2	-	-	-	Less than 15.2	-		
Laminator (EU-14)	1.2	1.2	-	-	-	Less than 15.2	-		
Printer (EU-09)	-	-	-	-	-	Less than 1.6	Less than 9 tons per		
Printer (EU-11)	-	-	-	-	-	Less than 6.2	year of a single HAP,		
Printer (EU-13)	-	-	-	-	-	Less than 4.7	less than 24 tons per year of a		
Wash Coater #2	-	-	-	-	-	Less than 3.1	com- bination of HAPs		
Insignificant Units	0.3	0.3	-	2.3	0.5	5.6	0.1		

		Potential to Emit after Issuance (tons/year)							
Process/facility	PM	PM-10	SO <sub>2</sub>	NO <sub>x</sub>	СО	VOC	HAPS		
Total Emissions	80.9	80.9	-	2.3	0.5	Less than 86.4	Less than 10 tons per year of a single HAP, less than 25 tons per year of a com- bination of HAPs		

# **County Attainment Status**

The source is located in Floyd County.

Pollutant	Status		
PM-10	Attainment		
SO <sub>2</sub>	Attainment		
$NO_2$	Attainment		
Ozone	Maintenance Attainment		
CO	Attainment		
Lead	Attainment		

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Floyd County has been designated as maintenance attainment or unclassifiable for ozone.
- (b) Floyd County has been classified as attainment or unclassifiable for PM10, SO<sub>2</sub>, NO<sub>2</sub>, NOx, CO, and Lead. Therefore, these requirements were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

# **Federal Rule Applicability**

- (a) The printing units (EU-09, EU-11, and EU-13) are subject to the New Source Performance Standard (40 CFR 60.580, Subpart FFF). NSPS Subpart FFF is applicable to the source because each printing unit is a rotagravure press and they were all constructed after the applicability date of 1/18/83. Pursuant to this subpart, the Permittee shall use inks with a weighted average VOC content less than 1.0 kilogram VOC per kilogram ink solids. Compliance with the VOC content limit for each ink shall be demonstrated using plant blending and inventory records in conjunction with ink manufacturers' formulation data.
- (b) 40 CFR 60, Subpart QQ (Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing) does not apply to this source since there are no publication rotogravure printing presses as defined in 40 CFR 60.431.

- (c) This source is not subject to the New Source Performance Standard for VOC emissions from the Polymer Manufacturing Industry, 40 CFR 60 Subpart DDD. Sources potentially regulated by this rule are those facilities involved in the manufacture of polypropylene, polyethylene, polystyrene, or ethylene terephthalate (poly). Product Specialties only purchases already manufactured resin to produce unsupported PVC film and fabric backed PVC wallcovering for the commercial market.
- (d) The natural gas boilers at this source are not subject to the New Source Performance Standards, 40 CFR 60 Subpart Dc, because each boiler has a design capacity smaller than 10 million Btu per hour.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.
  - (1) 40 CFR 63, Subpart KK (National Emission Standards for the Printing and Publishing Industry) does not apply as the source is not a major source of hazardous air pollutants (HAP) a defined in 40 CFR 63.2.
  - 40 CFR 63, Subpart JJJ: Group IV Polymers and Resins (National Emissions Standards for Hazardous Air Pollutants (NESHAPs) does not apply as the source is not a major source of hazardous air pollutants (HAP) as defined in 40 CFR 63.2. Also, sources potentially regulated by this action are those facilities which manufacture one or more of the following thermoplastic resins: acrylonitrile butadiene styrene, styrene acrylonitrile, methyl methacrylate acrylonitrile butadiene styrene, methyl methacrylate butadiene styrene, poly or nitrile resins. Product Specialties does not manufacture any of these resins. They purchase the manufactured resin to produce unsupported PVC film and fabric backed PVC wallcovering for the commercial market.
  - (3) 40 CFR 63, Subpart T (National Emission Standards for Halogenated Solvent Cleaning) does not apply to the degreaser which uses mineral spirits. Mineral spirits does not contain any of the chemical identified §60.460(a) that make it applicable to this subpart.

# State Rule Applicability - Entire Source

### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year and is located in Floyd County. Pursuant to this rule, the owner/operator of the source must submit an emission statement for the source. The statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6 and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8).

# 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9

or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 2-8 (FESOP)

Pursuant to 326 IAC 2-8, the following facilities shall be limited as follows:

- (a) The total material compounded from extruders EU-06 and EU-07 shall not exceed 9,127,920 pounds per twelve (12) consecutive month period with compliance determined at the end of each month. The emission rate shall not exceed 0.0043 lb of VOC per lb of compounded. These limits are equivalent to VOC emissions at 19.6 tons per year of VOC total for both extruders.
- (b) The VOC input for the rotogravure press EU-11 shall not exceed 6.2 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is equivalent to VOC emissions of less than 6.2 tons per year.
- (c) The VOC input from the wash coater #2 shall not exceed 3.1 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is equivalent to VOC emissions of less than 3.1 tons per year.
- (d) The VOC input for the rotogravure press EU-09 shall not exceed 1.6 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is equivalent to VOC emissions of less than 1.6 tons per year.
- (e) The VOC input for the rotogravure press EU-13 shall not exceed 4.7 tons per twelve (12) month period with compliance determined at the end of each month. This limit is equivalent to VOC emissions of less than 4.7 tons per year.
- (f) The production rate of laminators EU-08, EU-12, and EU-14 shall each be limited to 4,670,000 yards of film per twelve (12) consecutive month period with compliance determined at the end of each month and an emission rate of 0.0065 pounds of VOC per yard of film. These limits are equivalent to VOC emissions of 45.6 tons per year of VOC total for all three laminators.
- (g) The input of a single HAP to the printers (EU-09, EU-11, and EU-13) and the Wash Coater #2 shall not exceed 9 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The input of a combination of HAPs to the printers (EU-09, EU-11, and EU-13) and the Wash Coater #2 shall not exceed 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

The limits in conditions D.1.4 (a) through (f) are equivalent to less than 80.8 tons per year of VOC. These limits ensure that the VOC emissions for the entire source are less than one hundred (100) tons per year. The HAP input limits are equivalent to emissions of single HAPs of less than 10 tons per year and 25 tons per year of a combination of HAPs form the entire source. Therefore, the requirements of 326 IAC 2-7, are not applicable. The limit in D.1.3 (f) ensures that 326 IAC 8-1-6 does not apply to the laminators. The limit in D.1.3(g) also ensures that 326 IAC 20 and 40 CFR 63, Subpart KK do not apply.

The limits will result in an equivalent VOC emissions of 80.8 tons per 12 consecutive month period from the entire source. The HAP input limits are equivalent to emissions of single HAPs of less than 10 tons per year and 25 tons per year of a combination of HAPs from the entire source. Therefore, the requirements of 326 IAC 2-7 do not apply.

# 326 IAC 2-2 (Prevention of Significant Deterioration

The source was originally constructed in 1978 with emission units EU-1, EU-2, EU-5, EU-6, EU-7, EU-8, and EU-9. The total unrestricted emissions for these units were 116.4 tons per year of PM and 79.4 tons per year of VOC. As a result, the source was minor for PSD because it is not 1 of the 28 source categories and both VOC and PM/PM10 were less than 250 tons per year. Additional units have been installed at the source since the source was constructed in 1978. EU-10, EU-11, EU-12, and Wash Coater #2 were constructed in the First Significant Permit Modification 043-10076-00030, issued on November 16, 1998. Two natural gas fired dryers and one natural gas fired space heater were constructed in First Significant Permit Revision 043-10564-00039, issued on May 30, 2000. EU-13, EU-14, and one natural gas fired heater were constructed in Second Significant Permit Revision 043-13627-00039, issued on May 22, 2001.

All units at the source have a total unrestricted emissions below 250 tons per year for each pollutant (see potential to emit calculations). Therefore, the source is still minor for PSD and 326 IAC 2-2 and 40 CFR 52.21 are not applicable.

# 326 IAC 6-4 (Fugitive Dust Emissions)

The unpaved roads are subject to 326 IAC 6-4. The Permittee shall not allow fugitive dust to to escape beyond the property line or boundaries of the property right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

## 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

The source is located in Floyd County which is attainment for particulate matter. 326 IAC 6-5 applies to nonattainment areas of particulate matter or new sources of fugitive particulate matter emissions located anywhere in the state requiring a permit as set forth in 326 IAC 2, which has not received all the necessary preconstruction approvals before December 13, 1988. The source is in an attainment area and has received all necessary preconstruction approvals. Therefore, 326 IAC 6-5 is not applicable to this source.

### State Rule Applicability - Individual Facilities

# 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes)

The particulate from the storage silos (EU-1 & EU-2), the mixing operations (EU-5 & EU-10), the extruder lines (EU-06 & EU-07), and the laminating lines (EU-8, EU-12, and EU-14) shall not exceed the following allowable PM emissions when operating at a process weight rate as shown in the table below:

Process Facility	Stack ID	Process Throughput (tons/hr)	Allowable PM Emissions (lbs/hr)
Resin Powder Storage Silo (EU-1)	V1	0.44	2.37
CaCO <sub>3</sub> Storage Silo (EU-2)	V2	0.29	1.79
Plastic Film Mixing Line, EU-05	V3	0.794	3.52
Extrusion Unit, EU-06	S4	0.51	1.66
Extrusion Unit, EU-07	S5	0.51	1.66
Laminator, EU-08	S6	1440*	3.15
Plastic Film Mixing Line, EU-10	V3	0.794	3.52

Process Facility	Stack ID	Process Throughput (tons/hr)	Allowable PM Emissions (lbs/hr)
Laminator, EU-12	S8	1800*	3.66
Laminator, EU-14	S15	1200*	2.79
Total			24.12

<sup>\*</sup> This throughput limit is measured as yards of PVD sheet/hr

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

The baghouses shall be in operation at all times the silos, mixing, and extruder units are in operation in order to comply with this limit per manufacturers specifications. Based on stack testing the laminators are in compliance with this rule with no additional controls necessary.

### 326 IAC 8-2-11 (Surface Coating VOC Emission Limitations for Fabric and Vinyl Coating)

The source shall limit VOC emissions from the coating applicators of the printing operations (EU-9, EU-11, EU-13, and the wash coater #2) to no more than 4.8 lbs VOC per gallon of coating, excluding water. The worst-case, as-applied coating for the printing operations has a VOC content of 3.35 lbs per gallon coating and therefore, is in compliance with this rule.

326 IAC 8-2-11 is applicable to these units according to 326 IAC 8-2-1(a) because the source is located in Floyd County, the facilities were existing as of January 1, 1980, they saturate 100% of the substrate with a surface coating.

#### 326 IAC 8-7 (Specific VOC Reduction Requirements for Floyd County)

The VOC emission limits of 326 IAC 8-7-3 do not apply to this source because the sources potential to emit for the source has been limited to less than 100 tons of VOC per year and each coating facilities (EU-9, EU-11, EU-13, and #2 Wash Coater) potential to emit has been limited to less than 10 tons per year.

# 326 IAC 8-5-5 (Graphic Arts Operation)

The requirements of 326 IAC 8-5-5 do not apply to any of the printing presses because none of them are packaging rotagravure, publication rotogravure or flexographic printing operations.

### 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

EU-1, EU-2, EU-5, EU-6, EU-7, and EU-9 are facilities constructed prior to January 1, 1980. As a result they are not subject to 326 IAC 8-1-6.

EU-11, EU-13, and Wash Coater #2 are not subject to 326 IAC 8-1-6 because they are subject to 326 IAC 8-2-11.

<sup>1</sup> yard of PVC sheet = 15 ounces; 16 ounces = 1 lb

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EU-8, EU-12, and EU-14 are facilities constructed after January 1, 1980. Although they were constructed after January 1, 1980, they are not subject to 326 IAC 8-1-6 because each emission unit is limited to less than 25 tons per year.

326 IAC 8-6-1 (Organic Solvent Emission Limitations)

The source that existed before 1980 (EU-1, EU-2, EU-5, EU-6, EU-7, and EU-9) had potential emissions of less than 100 tons per year of VOC. Therefore, 326 IAC 8-6-1 does not apply to this source.

# State Rule Applicability - Insignificant Activities

326 IAC 8-3-2 (Cold Cleaner Operations) and 326 IAC 8-3-5 (Cold Degreaser Operation and Control)
The organic solvent degreasing operation are subject to 326 IAC 8-3-2 because it is an existing
facility as of January 1, 1980 located in Floyd county at a source with potential emissions equal to
or greater than 100 tons per year of VOC. The organic solvent degreasing operation is subject to
326 IAC 8-3-5 because it is located in Floyd county and existing as of July 1, 1990.

The degreasing operation shall comply with the requirements of this rule.

- (a) According to 326 IAC 8-3-2, the owner or operator shall:
  - (1) Equip the cleaner with a cover;
  - (2) Equip the cleaner with a facility for draining cleaned parts;
  - (3) Close the degreaser cover whenever parts are not being handled in the cleaner;
  - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
  - (5) Provide a permanent, conspicuous label summarizing the operation requirements; and
  - (6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a matter that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.
- (b) According to 326 IAC 8-3-5(a), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
  - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one hand if:
    - A) The solvent volatility is greater than three-tenths (0.3) pounds per square inch (15 millimeters of mercury) measured at 38 degrees Celsius (100 degrees Fahrenheit);
    - B) The solvent is agitated; or
    - C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than six-tenths (0.6) pounds per square inch (thirty-two (32) millimeters of mercury) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal

such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in 326 IAC 8-3-5(b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than six-tenths (0.6) pounds per square inch (thirty-two (32) millimeters of mercury) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
  - A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
  - B) A water cover when solvent is used is insoluble in, and heavier than, water.
  - C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (c) That pursuant to 326 IAC 8-3-5(b), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
  - (1) Close the cover whenever articles are not being handled in the degreaser.
  - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
  - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

#### 326 IAC 6-2-4 (Particulate Emissions Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4, the 2.7 MMBTU/hr natural gas boiler and 2.0 MMBTU/hr natural gas-fired boiler, which where constructed after September 21, 1983 shall be limited to 0.73 pounds per million BTU heat input. This is the lessor of the value presented in 326 IAC 6-2-4(a) for boilers less than 10 MMBtu/hr and the value obtained when using the following equation.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$
 Where  $Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.$ 

$$Pt = \frac{1.09}{4.7^{0.26}} = 0.73$$

$$Q = Total source maximum operating capacity rating in million Btu per hour heat input (4.7 MMBtu/hr)$$

# **Testing Requirements**

Stack testing is required to verify the VOC emission factor used for the laminators (EU-8, EU-12, and EU-14) (0.0065 pound per yard of film) and the extruders (EU-6 and EU-7) (0.0043 lb of VOC per Rb compounded). These stack tests are being required within 180 days of permit issuance because the original test was conducted over 5 years ago at a similar source. These tests are necessary to verify compliance with the FESOP limits.

# **Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

All compliance requirements from previous approvals were incorporated into this FESOP.

The complia nce monitori ng require ments applica ble to this source are as follows:

The plastic film mixing lines (EU-5 and EU-10) have the applicable compliance monitoring conditions as specified below:

(a) Visible emissions notations of each plastic film mixing line stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the

plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

(b) The Permittee shall record the total static pressure drop across the baghouse controlling each plastic film mixing line, at least once daily when the plastic film mixing line is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 to 8.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouses for the mixing process must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

The storage silos (EU-1 and EU-2) have applicable compliance monitoring conditions as specified below:

Visible emissions notations of each storage silo stack exhaust shall be performed during the loading operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

These monitoring conditions are necessary because the baghouses for the storage silos must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

#### Conclusion

The operation of this plastic film manufacturing plant shall be subject to the conditions of the attached (FESOP No.: F043-15615-00039).

# APPENIDX A EMISSIONS CALCULATIONS

Company Name: Product Specialites, Inc. Address: 2073 McDonald Avenue Permit: 043-15615-00089 Date: 3/20/02 Reviewer: ERG/EH

#### A) Plastic Film Manufacturing Line: Unrestricted Potential Emissions

The PVC process operations are batch processes. Therefore, in order to determine the potential emissions, this source provided the maximum rate of production in a given time frame. This value was then extrapolated out to calculate the potential maximum production per year.

#### 1) Storage and Handling of Bulk Material - EU-1 & EU-3, EU-2 & EU-4

The source has two (2) storage silos, one containing calcium carbonate and one containing resin pellets. The silos are equipped with baghouses to control PM emissions.

Raw Material	Unit ID	Max Rate	PM/PM10	PM/PM10	Pollution	PM/PM10
	Number	tons/hr	Emission Factor	Emissions	Control	Emissions with Contro
			lb PM/ton	tons/yr	% Efficiency	tons/yr
Resin Silo	EU-01	0.44	13	25.05	99.0	0.251
CaCO <sub>3</sub> Silo	EU-02	0.29	13	16.51	99.0	0.165
		•	Totals:	41.6		0.42

#### Methodology:

Emission Factors for the loading/transferring activities were derived from actual data: lb PM/ton material = 100 lb collected / 15,500 lb material \* 2000 lb/ton material Emission Factors for the mixing process are from AP 42, Chapter 11.13, Tables 11.13-2, SCC #3-05-012-23

Potential PM Emissions, tons/yr = max rate, tons/yr \* emission factor, lb PM/ton material \* ton/2000 lb \* 8760 hr/yr

Note: Calculations were taken from original FESOP 043-6294-00039

#### 2) Mixing Process

#### a) Plastic Film Mixing Process - EU-05

Raw Material	Unit ID	Max Rate	PM/PM10	PM/PM10	Pollution	PM/PM10
	Number	tons/hr	Emission Factor	Emissions	Control	Emissions with Contro
			lb PM/ton	tons/yr	% Efficiency	tons/yr
Dry Scale	EU-05-01	0.739	0.6	1.94	95.0	0.097
Scale Transfer	EU-05-02	0.794	0.6	2.09	99.0	0.021
Mixer Transfer	EU-05-03	0.794	0.6	2.09	99.0	0.021
Cool Blend Transfer	EU-05-04	0.794	0.6	2.09	99.0	0.02
Tote Transfer	EU-05-05	0.794	0.6	2.09	99.0	0.02
Ribbon Blend Transfer	EU-05-06	0.794	0.6	2.09	99.0	0.02
			Totals:	12.4		0.20

#### Methodology:

Emission Factors for the loading/transferring activities were derived from actual data: lb PM/ton material = 100 lb collected / 15,500 lb material \* 2000 lb/ton material

Potential PM Emissions, tons/yr = max rate, tons/yr \* emission factor, lb PM/ton material \* ton/2000 lb \* 8760 hr/yr

Note: Calculations were taken from original FESOP 043-6294-00039

#### b) Plastic Film Mixing Process - EU-10

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Raw Material	Unit ID	Max Rate	PM/PM10	PM/PM10	Pollution	PM/PM10
	Number	tons/yr	<b>Emission Factor</b>	Emissions	Control	Emissions with Contro
		-	lb PM/ton	tons/yr	% Efficiency	tons/yr
Dry Scale	EU-10-01	0.739	0.6	1.94	95.0	0.1
Scale Transfer	EU-10-02	0.794	0.6	2.09	99.0	0.021
Mixer Transfer	EU-10-03	0.794	0.6	2.09	99.0	0.021
Cool Blend Transfer	EU-10-04	0.794	0.6	2.09	99.0	0.02

Tote Transfer	EU-10-05	0.794	0.6	2.09	99.0	0.02
Ribbon Blend Transfer	EU-10-06	0.794	0.6	2.09	99.0	0.02
			Totals:	12.4		0.20

#### Methodology:

PM Emissions, tons/yr = max rate, tons/yr \* emission factor, lb PM/ton material \* ton/2000 lb

Note: Calculations were taken from TSD calculations in F043-10076-00039

#### c) Granular Operations (this portion of the process is an insignificant activity)

There are three (3) granulators at the source that chop waste film. This material is fed back into the hopper and mixed with raw materials.

The source estimates that 7% fo the film produced is waste and is granulated. A majority of the final product form this process is greater than 10 microns.

The maximum usage of the laminating process is 352 yards per hour. According to the source, 7% of the film produced is waste, which calculates out to be 24.6 yards waste per hour. The potential emissions, assuming that all waste produced is PM or PM-10, yields the following:

Unit	Max Waste	PM/PM10 Emission Factor	PM/PM10 Emissions
	yards/hr	lb PM/yard	tons/yr
Waste Film	24.6	0.0005	0.05

#### Methodology:

Emission Factor for the laminator was derived from actual stack test data from a similar source

Conversion: 1 yard = 15 ounces

Potential Emissions (tons/yr) = Max Usage (tons/hr) x Emission Factor (lb/ton) / 2,000 lb/ton x 8760 hrs/yr

Note: Calculations were taken from original FESOP 043-6294-00039

#### 3) Extruder Lines - EU-6 & EU-7

The raw materials are mixed and color blended to form a compound. This compound is then conveyed via auger to a hopper. The hopper feeds to the extruder line to produce a plastic film. The extrusion line consists of two (2) extrusion units, EU-06 and EU-07, each having a maximum capacity of 1750 lbs of compound per hour. The emission factor for this process was obtained from stack tests performed for the same process at a different source.

Unit	Unit ID	Max Usage	VOC	VOC	PM/PM10	PM/PM10
	Number	lb cmpd/hr	Emission Factor	Emissions	Emission Factor	Emissions
			lb VOC/lb cmpd	tons/yr	lb PM/lb cmpd	tons/yr
Extruder 1	EU-06	1020	0.0043	19.2	0.00232	10.4
Extruder 2	EU-07	1020	0.0043	19.2	0.00232	10.4
			Totals:	38.4		20.8

#### Methodology:

Emission Factors for the extruders were derived from actual stack test data from a similar source

Potential Emissions, tons/yr = maximum usage, lb cmpd/hr \* emission factor, lb pollutant/lb cmpd \* 8760 hrs/yr \* ton/2000 lb

Note: Calculations were taken from original FESOP 043-6294-00039

#### 4) Laminating Process Lines - EU-8, EU-12, EU-14

This is a combining function. Polyester is combined with a PVC sheet. The material that provides the bond is plastisol.

Unit	Unit ID	Max Usage	VOC	VOC	PM/PM10	PM/PM10
	Number	yards/hr	Emission Facto Emissions		Emission Factor	Emissions
			lb VOC/yard	tons/yr	lb PM/yard	tons/yr
Laminated Film	EU-08	1440	0.0065	41.0	0.0005	3.15

#### Methodology:

Emission Factors for the laminator were derived from actual stack test data from a similar source

Potential VOC Emissions, tons/yr = max usage, yards/hr \* VOC emission factor, lb VOC/yard \* 8760 hrs/yr \* tons/2000 lbs

Potential PM/PM10 Emissions, tons/yr = max usage, yards/hr \* PM emission factor, lb PM/yard \* 8760 hrs/yr \* tons/2000 lbs

Conversion: 1 yard PVC = 15 ounces; 1440 yds PVC/hr x 15 ounces/yd x 1 lb/16 ounces x 1 ton/2000 lb = 0.675 tons PVC/hr

Note: Calculations were taken from original FESOP 043-6294-00039

Unit	Unit ID	Max Usage	VOC VOC		PM/PM10	PM/PM10
	Number	yards/hr	nr Emission Facto Emissions		Emission Factor	Emissions
			lb VOC/yard	tons/yr	lb PM/yard	tons/yr
Laminated Film	EU-012	1800	0.0065	51.2	0.0005	3.94

#### Methodology:

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Emission Factors for the laminator were derived from actual stack test data from a similar source

Potential VOC Emissions, tons/yr = max usage, yards/hr \* VOC emission factor, lb VOC/yard \* 8760 hrs/yr \* tons/2000 lbs

Potential PM/PM10 Emissions, tons/yr = max usage, yards/hr \* PM emission factor, lb PM/yard \* 8760 hrs/yr \* tons/2000 lbs

Conversion: 1 yard PVC = 15 ounces; 1440 yds PVC/hr x 15 ounces/yd x 1 lb/16 ounces x 1 ton/2000 lb = 0.844 tons PVC/hr

Note: Calculations were taken from FESOP Siginificant Modification 043-10076-00039

Unit	Unit ID	Max Usage	VOC	VOC	PM/PM10	PM/PM10
	Number	yards/hr	Emission Facto	Emissions	Emission Factor	Emissions
			lb VOC/yard	tons/yr	lb PM/yard	tons/yr
Laminated Film	EU-014	1200	0.0065	34.2	0.0005	2.63

#### Methodology:

Emission Factors for the laminator were derived from actual stack test data from a similar source

Potential VOC Emissions, tons/yr = max usage, yards/hr \* VOC emission factor, lb VOC/yard \* 8760 hrs/yr \* tons/2000 lbs

Potential PM/PM10 Emissions, tons/yr = max usage, yards/hr \* PM emission factor, lb PM/yard \* 8760 hrs/yr \* tons/2000 lbs

Conversion: 1 yard PVC = 15 ounces; 1440 yds PVC/hr x 15 ounces/yd x 1 lb/16 ounces x 1 ton/2000 lb = 0.563 tons PVC/hr

Note: Calculations were taken from FESOP Siginificant Modification 043-10076-00039

#### 5) Printing Operations - EU-09, EU11, EU-13, #2 Wash Coater

In order for this source to be in compliance with 326 IAC 8-2-11, it must reduce VOC emissions from the coating applicators of the printing operations to no more than 4.8 lbs VOC per gallon of coating, excluding water. Information provided by the source indicates that the worst-case, as-applied coating for the printing operations has a VOC content of 3.35 lbs per gallon coating, and therefore, is in compliance with this rule.

Worst Case	Unit ID	Max Line Speed	Max Width	Max Throughput	Max Coverage	Wt % Volatile	Wt % Water	VOC Emissions
As-Applied Ink	Number	ft/min	inches	MM in^2/yr	lb/MM in^2	%	%	tons/yr
Ink/Colorant	EU-09	30	57	10785	15	77.8	64.4	10.8

#### Methodology:

Throughput = max line speed, ft/min \* 12 in/ft \* max print width, MMin^2 \* 60 min/hr \* 8760 hrs/yr = MMin^2 per Year

Pot VOC Emissions, tons/yr = max cover, lbs/MMin^2 \* wt % organics (wt % of volatiles (organics + H2O) - wt % of H2O) \* flash off, % \* throughput, MMin^2/yr \* tons/2000 lbs Heat set offset printing has an assumed flash off of 80%; other type of printers have a flash off of 100%

Note: Calculations were taken from FESOP 043-10076-00039

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Worst Case	Unit ID	Max Line Speed	Max Width	Max Throughput	Max Coverage	Wt % Volatile	Wt % Water	VOC Emissions
As-Applied Ink	Number	ft/min	inches	MM in^2/yr	lb/MM in^2	%	%	tons/yr
Ink/Colorant	EU-011	30	57	10785	14.4	77.8	64.4	10.4

#### Methodology:

Throughput = max line speed, ft/min \* 12 in/ft \* max print width, MMin^2 \* 60 min/hr \* 8760 hrs/yr = MMin^2 per Year

Pot VOC Emissions, tons/yr = max cover, lbs/MMin^2 \* wt % organics (wt % of volatiles (organics + H2O) - wt % of H2O) \* flash off, % \* throughput, MMin^2/yr \* tons/2000 lbs Heat set offset printing has an assumed flash off of 80%; other type of printers have a flash off of 100%

Note: Calculations were taken from FESOP 043-10076-00039

Worst Case	Unit ID	Max Line Speed	Max Width	Max Throughput	Max Coverage	Wt % Volatile	Wt % Water	VOC Emissions
As-Applied Ink	Number	ft/min	inches	MM in^2/yr	lb/MM in^2	%	%	tons/yr
Ink/Colorant	EU-013	30	57	10785	14.4	77.8	64.4	10.4

#### Methodology:

Throughput = max line speed, ft/min \* 12 in/ft \* max print width, MMin^2 \* 60 min/hr \* 8760 hrs/vr = MMin^2 per Year

Pot VOC Emissions, tons/yr = max cover, lbs/MMin^2 \* wt % organics (wt % of volatiles (organics + H2O) - wt % of H2O) \* flash off, % \* throughput, MMin^2/yr \* tons/2000 lbs Heat set offset printing has an assumed flash off of 80%; other type of printers have a flash off of 100%

Note: Calculations were taken from FESOP 043-10076-00039

THROUGHPUT	l		
Press I.D.	MLS (ft/min)	MPW (in)	MMin^2/YEAR
#2 Wash Coat	150	5	7 5392.7

INK VOCS					
Ink Name	Max Coverage	Weight %	Flash Off %	Throughput	VOC Emissions
Press Id	'(lbs/MMin^2)	Volatiles*		(MMin^2/Year)	(tons/year)
					7.76 x 4 printing heads
#2 Printer	14.4	2%	100%	53927	31.1
#2 Washer	28.8	2%	100%	53927	15.5

Total VOC = 46.6 Ton/yr

\*VOC (Tons/Year) = Maximum Coverage pounds per MMin^2 \* Weight % volatiles \* Flash off \* Throughput \* 1 Ton per 2000 pounds

#### METHODOLOGY

MLS = Maximum Line Speed, MPW = Maximum Print Width

Throughput = Maximum line speed feet per minute \* Convert feet to inches \* Maximum print width inches \* 60 minutes per hour \* 8760 hours per year = MMin^2 per Year VOC = Maximum Coverage pounds per MMin^2 \* Weight percentage volatiles (water minus organics) \* Flash off \* Throughput \* Tons per 2000 pounds = Tons per Year NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF 0F 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%. (Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93))

#### HAPS from Printing Operations: The source uses the same inks in each unit.

Total HAPS = 2.25% by wt. for each unit (Menthanol = 0.45% & Glycol Ether (Butyl Cellosive) = 1.8%)

Unit ID	otential VOC (tpy	Menthanol %	Glycol Ether %	Total %	Menthanol (tpy)	Glycol Ether (tpy)	Total (tpy)
EU-9	10.8	0.45	1.8	2.25	0.1	0.2	0.3
EU-11	10.4	0.45	1.8	2.25	0.1	0.2	0.3
EU-13	10.4	0.45	1.8	2.25	0.1	0.2	0.3
#2 Wash Coater	10.4	0.45	1.8	2.25	0.1	0.2	0.3
Total	42.0	0.45	1.8	2.25	0.4	0.8	1.2

#### Methodology

Potential VOC Emissions (tpy) x % by wt of individual HAP = Individual HAP emission (tpy)

#### Insignificant Activities:

#### 1) Natural Gas Fuel Combustion

Heat Input Capacity, MMBtu/hr	=	10.4	Potential Throughput, MMCF/yr	=	45.6

	PM/PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	12	0.6	100	5.3	21
			(uncontrolled)		(uncontrolled)
Potential Emission in tons/yr	0.273	0.014	2.278	0.121	0.478

#### Methodology:

MMBtu = 1,000,000 Btu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Potential Emissions (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

#### 2) Degreasing Operations

Material	Density	Wt % VOC	/t % Total HAP	Max Usage	Potential VOC Emissions	Total HAPs Emissions
	lb/gal	%	%	gal/yr	tons/yr	tons/yr
Mineral Spirits	4.9	99.9	2.0	2246	5.50	0.110

#### Methodology:

Max Usage, gal/yr = actual usage (40 gal/yr) / actual hrs operation (156 hrs/yr) \* potential hrs (8760 hrs/yr)

Potential VOC Emissions, tons/yr = wt % of volatiles \* density, lb/gal \* max usage, gal/yr \* 1 ton/2000 lbs

HAPs Emissions: Toluene = 0.5%, Xylenes = 1.0%, Ethyl Benzene = 0.5%, Total HAPs = 2%

#### TOTAL UNRESTRICTED POTENTIAL EMISSIONS:

Unit ID	PM	PM-10	SO2	NOX	CO	VOC	HAPS
EU-1	25.1	25.1	-	-	-	-	-
EU-2	16.5	16.5	-	-	-	-	-
EU-5	12.4	12.4	-	-	-	-	-
EU-10	12.4	12.4	-	-	-	-	-
EU-6	10.4	10.4	-	-	-	19.2	-
EU-7	10.4	10.4	-	-	-	19.2	-
EU-8	3.2	3.2	-	-	-	41.0	-
EU-12	3.9	3.9	-	-	-	51.2	-
EU-14	2.6	2.6	-	-	-	34.2	-
EU-9	-	-	-	-	-	10.8	0.3
EU-11	-	-	-	-	-	10.4	0.3
EU-13	-	-	-	-	-	10.4	0.3
#2 Wash Coat	-	-	-	-	-	46.6	0.3

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96.9	96.9	0.0	0.0	0.0	243.0	1.2
0.05	0.05	-	-	-	-	
0.273	0.273	0.014	2.278	0.478	0.121	-
-	-	-	-	-	5.5	0.11
0.3	0.3	0.0	2.3	0.5	5.6	0.1
•						
97.2	97.2	0.0	2.3	0.5	248.6	1.3
	0.05 0.273 - 0.3	0.05 0.05 0.273 0.273  0.3 0.3	0.05         0.05         -           0.273         0.273         0.014           -         -         -           0.3         0.3         0.0	0.05         0.05         -         -           0.273         0.273         0.014         2.278           -         -         -         -           0.3         0.3         0.0         2.3	0.05         0.05         -         -         -           0.273         0.273         0.014         2.278         0.478           -         -         -         -         -           0.3         0.3         0.0         2.3         0.5	0.05         0.05         - </td

#### A) Plastic Film Manufacturing Line: Potential to Emit after Issuance

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#### 1) Storage and Handling of Bulk Material - EU-1 & EU-3, EU-2 & EU-4

See PM emissions without controls for these units

Controlled emissions are not taken into account because they are not practically enforceable in the permit.

#### 2) Mixing Process - Plastic Film Mixing Process - EU-5 & EU-10

See PM emissions without control for these units.

Controlled emissions are not taken into account because they are not practically enforceable in the permit.

#### 3) Extruder Lines - EU-6 & EU-7

Unit	Unit ID	Max Usage	VOC	Limited VOC	PM/PM10	Limited PM/PM10
	Number	lb cmpd/yr	Emission Factor	Emissions	Emission Factor	Emissions
			lb VOC/lb cmpd	tons/yr	lb PM/lb cmpd	tons/yr
Extruder 1	EU-06	4563960	0.0043	9.8	0.00232	5.3
Extruder 2	EU-07	4563960	0.0043	9.8	0.00232	5.3
			Totals:	19.6		10.6

#### Methodology:

Emission Factors for the extruders were derived from actual stack test data from a similar source

Limited Emissions, tons/yr = limited usage, lb cmpd/yr \* emission factor, lb pollutant/lb cmpd \* ton/2000 lb

#### 4) Laminating Process Lines - EU-8, EU-12, EU-14

Unit	Unit ID	Limited Usage	VOC	Limited VOC	PM/PM10	Limited PM/PM10
	Number	yards/yr	Emission Facto	Emissions	Emission Factor	Emissions
			lb VOC/yard	tons/yr	lb PM/yard	tons/yr
Laminated Film	EU-8,-12, -14	14,010,000	0.0065	45.5	0.0005	3.50

#### Methodology:

Emission Factors for the laminator were derived from actual stack test data from a similar source

Limited VOC Emissions, tons/yr = limited usage, yards/yr  $^*$  VOC emission factor, lb VOC/yard  $^*$  tons/2000 lbs Limited PM/PM10 Emissions, tons/yr = max usage, yards/yr  $^*$  PM emission factor, lb PM/yard  $^*$  tons/2000 lbs

Individual Unit Limited VOC Emissions = 45.5 tons VOC/yr / 3 = 15.2 tpy VOC

Individual Unit Limited PM/PM-10 Emissions = 5.5 tons PM or PM-10/yr / 3 = 1.2 tpy PM/PM-10

#### 5) Printing Operations - EU-09, EU11, EU-13, #2 Wash Coater

Worst Case	Unit ID	Max Line Speed	Max Width	Lim Throughput	Max Coverage	Wt % Volatile	Wt % Water	VOC Emissions
As-Applied Ink	Number	ft/min	inches	MM in^2/yr	lb/MM in^2	%	%	tons/yr
Ink/Colorant	EU-09	30	57	1600	15	77.8	64.4	1.6

#### Methodology:

Limited VOC Emissions, tons/yr = max cover, lbs/MMin^2 \* wt % organics (wt % of volatiles (organics + H2O) - wt % of H2O) \* flash off, % \* throughput, MMin^2/yr \* tons/2000 lbs Heat set offset printing has an assumed flash off of 80%; other type of printers have a flash off of 100%

Note: VOC emission limit was established in previous FESOP

Worst Case	Unit ID	Max Line Speed	Max Width	Max Throughput	Max Coverage	Wt % Volatile	Wt % Water	VOC Emissions
As-Applied Ink	Number	ft/min	inches	MM in^2/yr	lb/MM in^2	%	%	tons/yr
Ink/Colorant	EU-011	30	57	6400	14.4	77.8	64.4	6.2

#### Methodology:

Limited VOC Emissions, tons/yr = max cover, lbs/MMin^2 \* wt % organics (wt % of volatiles (organics + H2O) - wt % of H2O) \* flash off, % \* throughput, MMin^2/yr \* tons/2000 lbs Heat set offset printing has an assumed flash off of 80%; other type of printers have a flash off of 100%

Note: VOC emission limit was established in previous FESOP

Worst Case	Unit ID	Max Line Speed	Max Width	Max Throughput	Max Coverage	Wt % Volatile	Wt % Water	VOC Emissions
As-Applied Ink	Number	ft/min	inches	MM in^2/yr	lb/MM in^2	%	%	tons/yr
Ink/Colorant	EU-013	30	57	4850	14.4	77.8	64.4	4.7

#### Methodology:

Limited VOC Emissions, tons/yr = max cover, lbs/MMin^2 \* wt % organics (wt % of volatiles (organics + H2O) - wt % of H2O) \* flash off, % \* throughput, MMin^2/yr \* tons/2000 lbs Heat set offset printing has an assumed flash off of 80%; other type of printers have a flash off of 100%

Note: VOC emission limit was established in previous FESOP

THROUGHPUT			
Press I.D.	MLS (ft/min)	MPW (in)	MMin^2/YEAR
#2 Wash Coat	150	57	5392.7

	INK VOCS					
	Ink Name	Max Coverage	Weight %	Flash Off %	Throughput	Potential Emissions
	Press Id	'(lbs/MMin^2)	Volatiles*		(MMin^2/Year)	(TONS/YEAR)
						0.5
7	#2 Printer - 4 heads	14.4	2%	100%	3600	2.1
	#2 Washer	28.8	2%	100%	3600	1.0

Total VOC =	3.1 Ton/yr
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#### METHODOLOGY

MLS = Maximum Line Speed, MPW = Maximum Print Width

VOC = Maximum Coverage pounds per MMin^2 \* Weight percentage volatiles (water minus organics) \* Flash off \* Throughput \* Tons per 2000 pounds = Tons per Year

NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%.

(Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93))

Note: VOC emission limit was established in previous FESOP

#### HAPS from Printing Operations: The source uses the same inks in each unit.

Total HAPS = 2.25% by wt. for each unit (Menthanol = 0.45% & Glycol Ether (Butyl Cellosive) = 1.8%)

Unit ID	Limited VOC (tpy)	Menthanol %	Glycol Ether %	Total %	Menthanol (tpy)	Glycol Ether (tpy)	Total (tpy)
EU-9	1.6	0.45	1.8	2.25	0.01	0.03	0.04
EU-11	6.2	0.45	1.8	2.25	0.03	0.11	0.14
EU-13	4.7	0.45	1.8	2.25	0.02	0.08	0.11
#2 Wash Coater	3.1	0.45	1.8	2.25	0.01	0.06	0.07
Total	15.6	0.45	1.8	2.25	0.1	0.3	0.4

#### Methodology

Potential VOC Emissions (tpy) x % by wt of individual HAP = Individual HAP emission (tpy)

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#### POTENTIAL TO EMIT AFTER ISSUANCE

Unit ID	PM	PM-10	SO2	NOX	CO	VOC	HAPS
EU-1	25.1	25.1	-	-	-	-	-
EU-2	16.5	16.5	-	-	-	-	-
EU-5	12.4	12.4	-	-	-	-	-
EU-10	12.4	12.4	-	-	-	-	-

Total	80.6	80.6	0.0	0.0	0.0	80.8	0.4
#2 Wash Coat	-	-	-	-	-	3.1	0.07
EU-13	-	-	-	•	-	4.7	0.11
EU-11	-	-	-	-	-	6.2	0.14
EU-9	-	-	-	ı	-	1.6	0.04
EU-14	1.2	1.2	-	•	-	15.2	-
EU-12	1.2	1.2	-	ı	-	15.2	-
EU-8	1.2	1.2	-	•	-	15.2	-
EU-7	5.3	5.3	-	-	-	9.8	-
EU-6	5.3	5.3	-	-	-	9.8	-

Insignificant Act.							
Granular Operation	0.05	0.05	-	-	=	-	
NG Fuel Combust.	0.273	0.273	0.014	2.278	0.478	0.121	-
Degreasing	-	-	-	-	=	5.5	0.11
Total	0.3	0.3	0.0	2.3	0.5	5.6	0.1
·							
TOTAL LIMITED	80.9	80.9	0.0	2.3	0.5	86.4	0.5